

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  Form PTO-1449	Docket Number	Application Number
	032028-0311061	09/708,713
	Applicant(s)	
	Jay PETERSON et al.	
	Filing Date	Group Art Unit
	November 9, 2000	2878

**U.S. PATENT DOCUMENTS**

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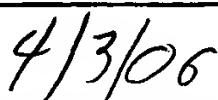
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							YES	NO

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

<i>h</i>	1A	Technical Proposal – "Vehicle Inspection Instrumentation"; submitted to California Air Resources Board; September 1, 1971, Lockheed Palo Alto Research Laboratory, Lockheed Missiles & Space Company – A Group Division of Lockheed Aircraft Corporation, Palo Alto, California
<i>h</i>	1B	HOSHIZAKI, <i>et al.</i> , Final Report – "Vehicle Inspection Instrumentation"; submitted to California Air Resources Board; June 1973, Lockheed Palo Alto Research Laboratory, Lockheed Missiles & Space Company – A Group Division of Lockheed Aircraft Corporation, Palo Alto, California
<i>n</i>	1C	<a href="http://www.epa.gov/otaq/15-remot.htm">http://www.epa.gov/otaq/15-remot.htm</a> ; "Remote Sensing: A Supplemental Tool for Vehicle Emission Control," August 1993, EPA 400-F-92-017, Fact Sheet OMS-15; 4 pages
<i>n</i>	1D	LUCIEN W. CHANEY, "The Remote Measurement of Traffic Generated Carbon Monoxide, APCA Note-Book," Journal of the Air Pollution Association; Copyright 1983; 3 pages
<i>h</i>	1E	PAUL STOCKWELL, "Tunable Diode Laser Systems Break New Ground in Water Vapour Analysis"; IMA Ltd., Unit Newall Hall Park, Otley, West Yorkshire, United Kingdom; [undated]; 8 pages
<i>n</i>	1F	MARK G. ALLEN, "Diode Laser Absorption Sensors for Gas Dynamic and Combustion Flows," Copyright 1998 Measurement Science and Technology 9; 61 pages
<i>n</i>	1G	KERRY L. SWAYNE, "Infrared Remote Sensing of On-Road Motor Vehicle Emissions in Washington State," March, 1999, Air Quality Program, Washington State Department of Ecology, Washington; Publication #99-204; 20 pages
<i>n</i>	1H	ROBERT D. STEPHENS, "Remote Sensing Data and a Potential Model of Vehicle Exhaust Emissions," November 1994, Vol. 44, Journal of Air & Waste Management Association, pp. 1284-1292
<i>n</i>	1I	"An Analysis of On-Road Remote Sensing as a Tool for Automobile Emissions Control," Final Report Prepared by University of Denver Chemistry Department, Colorado, March 1990; 174 pages; prepared for Illinois Department of Energy and Natural Resources
<i>n</i>	1J	ROBERT D. STEPHENS, <i>et al.</i> , "Remote Sensing Measurements of In-Use Vehicle Carbon Monoxide and Hydrocarbon Exhaust Emissions," Environmental Science Department, Michigan, to be presented to Society of Automotive Engineers Government/Industry Meeting, Washington, D.C., May 15, 1991; 9 pages
<i>n</i>	1K	THOMAS C. AUSTIN, <i>et al.</i> , "An Evaluation of "Remote Sensing" for the Measurement of Vehicle Emissions," prepared for The California Air Resources Board and The California I/M Review Committee, August 28, 1990, 30 pages; prepared by Sierra Research, Inc., California

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<i>h</i>	4/2/06
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N	2A	ROBERT D. STEPHENS, <i>et al.</i> , "Remote Sensing Measurements of Carbon Monoxide Emissions from On-Road Vehicles," Copyright January 1991, Air & Waste Management Association, Volume 42, No. 1, pp. 39-46					
N	2B	DONALD H. STEDMAN, <i>et al.</i> , "Remote Sensing of On-Road Vehicle Emissions," Final Report to Coordinating Research Council, The University of Denver, January 6, 1992, 21 pages					
N	2C	PETER POPP, <i>et al.</i> , "Development of a High-Speed Ultraviolet Spectrophotometer Capable of Real-Time NO and Aromatic Hydrocarbon Detection in Vehicle Exhaust," Department of Chemistry, University of Denver, Colorado, Prepared for Proceedings of the 7 <sup>th</sup> CRC On-Road Vehicle Emissions Workshop, San Diego, California, April 9-11, 1997; 10 pages					
N	2D	JOHN DIDOMENICO, <i>et al.</i> , "Preliminary Results from Cold Start Sensor Testing," Presented to 7 <sup>th</sup> CRC On-Road Vehicle Emissions Workshop, San Diego, California April 9-11, 1997; 1 page					
N	2E	GARY A. BISHOP, <i>et al.</i> , "Enhancements of Remote Sensing for Vehicle Emissions in Tunnels," Air & Waste Management Association, Vol. 44, February 1994, pp. 169-175					
N	2F	PAUL LEONARD GUENTHER, "Contributions to On-Road Remote Sensing of Automobile Exhaust," A Thesis Presented to the Faculty of Natural Sciences, Mathematics, and Engineering, University of Denver, June 1992, 95 pages					
N	2G	DONALD H. STEDMAN, <i>et al.</i> , "On-Road Remote Sensing of CO and HC Emissions in California," Prepared for Research Division, California Air Resources Board, Sacramento, CA, submitted by University of Denver Chemistry Department, February 1994, 136 pages					
N	2H	"Unstaffed On-Road Emissions Measurement Systems Services," Prepared by Parsons Engineering Science, Inc., Pasadena, California, September 1995					
N	2I	"Proposal/Quote for Unstaffed On-Road Emissions Measurement Systems Services" in response to Phase IV - RFQ #94/95-003, prepared by Remote Sensing Technologies, Inc. delivered to Department of Consumer Affairs, Bureau of Automotive Repair, Sacramento, California, September 1, 1995					
N	2J	STEVEN H. CADLE, <i>et al.</i> , "Measurement of Exhaust Particulate Matter Emissions from In-Use Light-Duty Motor Vehicles in the Denver, Colorado Area," Final Report, prepared for Coordinating Research Council, Atlanta, Georgia, 12/09/97, prepared by General Motors R&D Center, Michigan; 20 pages					
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✓	3A	STEVEN H. CADLE, <i>et al.</i> , "Measurement of Exhaust Particulate Matter Emissions from In-Use Light-Duty Motor Vehicles in the Denver, Colorado Area," Final Report, prepared for Coordinating Research Council, Atlanta, Georgia, 3/24/98, "Appendix E. University of Denver Remote Sensing Observation of Smoking Vehicles," prepared by General Motors R&D Center, Michigan; 20 pages					
✓	3B	ROBERT D. STEPHENS, <i>et al.</i> , "Remote Sensing of Carbon Monoxide Emissions from On-Road Vehicles," Environmental Science Department, General Motors Research Laboratories, Michigan for presentation to Air and Waste Management Association, NC, May 1, 1990, 46 pages					
✓	3C	"Description and Documentation for Interim Vehicle Clean Screening Credit Utility," Draft Report, United States Environmental Protection Agency, May 1998, 40 pages					
✓	3D	DAVID S. E. PETHERICK, "Ontario's Indoor, Controlled-Mode Remote Sensing I/M Prescreen Concept," Ministry of Transportation of Ontario, Copyright 1996 Society of Automotive Engineers, Inc., 9 pages					
✓	3E	P. A. WALSH, <i>et al.</i> , "Texas 1996 Remote Sensing Feasibility Study," Final Report, prepared for Texas Natural Resource Conservation Commission, Austin, Texas, 8/29/97, prepared by Desert Research Institute, Energy and Environmental Engineering Center, Reno, Nevada, 9 pages					
✓	3F	"On Road Emissions Measurement System - Specifications," Bureau of Automotive Repair, August 30, 1999, Revision - J, 15 pages					
✓	3G	CRAIG S. RENDAHL, "Further Analysis of Wisconsin's Remote Vehicle Emissions Sensing Feasibility Studies," "Quality Control Efforts of Remote Vehicle Emissions Sensing," and "Data Handling and Validation from Wisconsin's Remote Vehicle Emissions Sensing Studies," Presented at the Air & Waste Management Annual Measurement of Toxics and Related Pollutants Conference, Research Triangle Park, North Carolina, 5/96, 34 pages.					
✓	3H	JAMES D. PETERSON, <i>et al.</i> , "Find and Fix the Polluters", Chemtech, January 1992, Copyright 1992 American Chemical Society, 7 pages.					
✓	3I	RSD 1000 Operator's Manual (Preliminary), Remote Sensing Technologies, IFB No. 94019, June 1993, 66 pages.					
✓	3J	RSD-1000 Remote Sensing Device Information Package to Mr. Wolf Klassen, Department of Natural Resources, Presented by Dennis L. Smith, February 24, 1993, 123 pages.					
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<i>h</i>	4A	ROBERT D. STEPHENS, <i>et al.</i> , "An Experimental Evaluation of Remote Sensing-Based Hydrocarbon Measurements: A Comparison to FID Measurements", <u>Journal of the Air &amp; Waste Management Association</u> , Volume 46, February 1996, pages 148-158.
<i>h</i>	4B	DONALD H. STEDMAN, "Automobile Carbon Monoxide Emission", <u>Environmental Science &amp; Technology</u> , Volume 23, No. 2, 1989, pages 147-149.
<i>h</i>	4C	MASAYUKI ADACHI, <i>et al.</i> , "Automotive Emission Analyses Using FTIR Spectrophotometer", Published by the Society of Automotive Engineers, SAE# 920723, pages 820-827.
<i>h</i>	4D	MICHAEL D. KOPLOW, <i>et al.</i> , "Characterization of On-Road Vehicle NO Emissions by Means of a TILDAS Remote Sensing Instrument", Published by the Coordinating Research Council, Published for the 7 <sup>th</sup> CRC On-Road Vehicle Emissions Workshop, March 11, 1997, pages 1-25.
<i>h</i>	4E	SCOTT E. MCLAREN, <i>et al.</i> , "Comparison of an Open Path UV and FTIR Spectrophotometer", Published by the Air & Waste Management Association, Published for Presentation at the 85 <sup>th</sup> Annual Meeting & Exhibition, Kansas City, Missouri, June 21-26, 1992, pages 1-10.
<i>h</i>	4F	"Developing an Inspection/Maintenance Program for Alternately-Fueled Vehicles", Third Interim Report Submitted to the California Bureau of Automotive Repair, Submitted by Radian Corporation, April 20, 1993, 147 pages.
<i>h</i>	4G	IAIN FREDERICK MCVEY, "Development of a Remote Sensor for Mobile Source Nitric Oxide", A Thesis Presented to the Faculty of Natural Sciences, Mathematics, and Engineering, University of Denver, November 1992, 111 pages.
<i>h</i>	4H	S. P. BEATON, <i>et al.</i> , "Emission Characteristics of Mexico City Vehicles", <u>Journal of the Air &amp; Waste Management Association</u> , Volume 42, No. 11, November 1992, pages 1424-1429.
<i>h</i>	4I	DOUGLAS R. LAWSON, <i>et al.</i> , "Emissions from In-Use Motor Vehicles in Los Angeles: A Pilot Study of Remote Sensing and the Inspection and Maintenance Program", <u>Journal of the Air &amp; Waste Management Association</u> , Volume 40, No. 8, August 1990, pages 1096-1105.
<i>h</i>	4J	YI ZHANG, <i>et al.</i> , "Enhancement of Remote Sensing for Mobile Source Nitric Oxide", <u>Journal of the Air &amp; Waste Management Association</u> , Volume 46, January 1996, pages 25-29.
<i>h</i>	4K	DONALD H. STEDMAN, <i>et al.</i> , "Evaluation of a Remote Sensor for Mobile Source CO Emissions", U.S. Environmental Protection Agency, CR-815778-01-0, Report No. EPA/600/4-90/032, January 1991, 90 pages.

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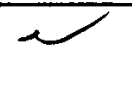

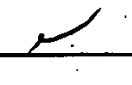

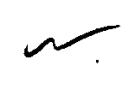

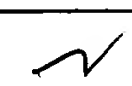
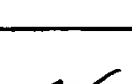

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	5A	JAMES BUTLER, <i>et al.</i> , "Factors Affecting the NDIR Measurement of Exhaust Hydrocarbons", Published by the Coordinating Research Council, Published for the CRC 5 <sup>th</sup> On-Road Vehicle Emissions Workshop, 1995, 16 pages.
	5B	SCOTT E. MCLAREN, <i>et al.</i> , "Flux Measurements Using Simultaneous Long Path Ultraviolet and Infrared Spectroscopy", Published by the Air & Waste Management Association, Published for Presentation at the 83 <sup>rd</sup> Annual Meeting & Exhibition, Pittsburgh, Pennsylvania, June 24-29, 1990, 7 pages.
	5C	GARY A. BISHOP, <i>et al.</i> , "Infrared Emission and Remote Sensing", <u>Journal of the Air &amp; Waste Management Association</u> , Volume 42, No. 5, May 1992, pages 695-697.
	5D	HAKAN AXELSSON, <i>et al.</i> , "Measurement of Aromatic Hydrocarbons with the DOAS Technique", <u>Applied Spectroscopy</u> , Volume 49, No. 9, 1995, pages 1254-1260.
	5E	GARY A. BISHOP, <i>et al.</i> , "Method Comparisons of Vehicle Emissions Measurements in the Fort McHenry and Tuscarora Mountain Tunnels", <u>Atmospheric Environment</u> , Volume 30, No. 12, 1996, pages 2307-2316.
	5F	DONALD H. STEDMAN, <i>et al.</i> , "NO <sub>x</sub> Data by Remote Sensing", Published by the Coordinating Research Council, Published for the 5 <sup>th</sup> CRC On-Road Vehicle Emissions Workshop, April 3-5, 1995, 16 pages.
	5G	DONALD H. STEDMAN, <i>et al.</i> , "On-Road Carbon Monoxide and Hydrocarbon Remote Sensing in the Chicago Area", Final Report Prepared by University of Denver Chemistry Department, Prepared for Illinois Department of Energy and Natural Resources, Office of Research and Planning, Illinois Contract AQ 40, Project 91/122, Report No. ILENR/RE-AQ-91/14, October 1991, pages 1-70.
	5H	GARY A. BISHOP, <i>et al.</i> , "On-Road Carbon Monoxide Emission Measurement Comparisons for the 1988-1989 Colorado Oxy-Fuels Program", <u>Environmental Science &amp; Technology</u> , Volume 24, No. 6, 1990, pages 843-847.
	5I	DONALD H. STEDMAN, <i>et al.</i> , "On-Road CO Remote Sensing in the Los Angeles Basin", Final Report Prepared for the Research Division, California Air Resources Board, Submitted by University of Denver Chemistry Department, August 1991, Contract No. A932-189, 70 pages.
	5J	SCOTT MCLAREN, "Open Path Spectrometers for Atmospheric Monitoring", A Dissertation Presented to the Faculty of Natural Sciences, Mathematics and Engineering, November 1995, 170 pages.

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<i>h</i>	6A	CAROL E. LYONS, <i>et al.</i> , "Remote Sensing Enhanced Motor Vehicle Emissions Control for Pollution Reduction in the Chicago Metropolitan Area: Siting and Issue Analysis", Final Report Prepared by University of Denver Atmospheric Science Center, Prepared for Illinois Department of Energy and Natural Resources, Office of Research and Planning, Illinois Contract AQ 30, Project 90/009, Report No. ILENR/RE-AQ-91/15, October 1991, pages 1-65.
<i>u</i>	6B	PETER JOHN POPP, "Remote Sensing of Nitric Oxide Emissions from Planes, Trains and Automobiles", A Dissertation Presented to the Faculty of Natural Sciences, Mathematics and Engineering, August 1999, 170 pages.
<i>u</i>	6C	BRETT C. SINGER, <i>et al.</i> , "Scaling of Infrared Remote Sensor Hydrocarbon Measurements for Motor Vehicle Emission Inventory Calculations", <i>Environmental Science &amp; Technology</i> , Volume 32, No. 21, 1998, pages 3241-3248.
<i>u</i>	6D	LUCIAN W. CHANEY, "The Remote Measurement of Traffic Generated Carbon Monoxide", <i>Journal of the Air Pollution Control Association</i> , Volume 33, No. 3, March 1983, pages 220-222.
<i>u</i>	6E	JOSE LUIS JIMENEZ-PALACIOS, "Understanding and Quantifying Motor Vehicle Emissions with Vehicle Specific Power and TILDAS Remote Sensing", A Dissertation Presented to the Department of Mechanical Engineering, February 1999, 360 pages.
<i>u</i>	6F	"Vehicle Inspection Instrumentation", Published by the Lockheed Missiles and Space co., Inc., Report No. ARB-R-643-73-26, June 30, 1973, 99 pages.
<i>u</i>	6G	JOHN E. SIGSBY, JR., <i>et al.</i> , "Volatile Organic Compound Emissions from 46 In-Use Passenger Cars", <i>Environmental Science &amp; Technology</i> , Volume 21, No. 5, 1987, pages 466-475.
<i>u</i>	6H	YI ZHANG, <i>et al.</i> , "Worldwide On-Road Vehicle Exhaust Emissions Study by Remote Sensing", <i>Environmental Science &amp; Technology</i> , Volume 29, No. 9, 1995, pages 2286-2294.

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